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On 6-16-03

TOWNSEND and TOWNSEND and CREW LLP

By: Linda Shaffer

PATENT  
Attorney Docket No.: 18781-007320  
Client Reference No.: T00-024-2/US

*1647*

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*TECH CENTER 1600/290*

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Zhaodan Cao, *et al.*

Application No.: 10/290,088

Filed: November 6, 2002

For: IRAK-M KNOCKOUT MICE

Examiner: Christopher J. Nichols

Art Unit: 1647

**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

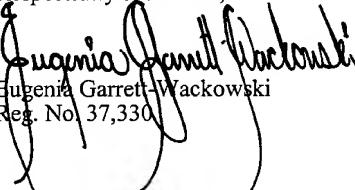
Also enclosed is a copy of the Search/Examination report corresponding to the PCT application.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicants believe that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

  
Eugenia Garrett-Wackowski  
Reg. No. 37,330

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PTO/SB/08A (10-01)

Approved for use through 10/31/2002, OMB 0651-0031

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Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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|------------------------|-------------------------|
| Application Number     | 09/989,981              |
| Filing Date            | November 20, 2001       |
| First Named Inventor   | Helen H. Hobbs, et. al. |
| Art Unit               | 1647                    |
| Examiner Name          | Christopher J. Nichols  |
| Attorney Docket Number | 18781-007320            |

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## U.S. PATENT DOCUMENTS

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Sheet

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| Examiner Name          | Christopher J. Nichols |
| Attorney Docket Number | 18781-007320           |

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|---------------------|-----------------------|---|----------------|
|                     | 4                     | BEATTY et al., <i>Am. J. Hum. Genet.</i> , 38:492-504 (1986)  |                |
|                     | 5                     | BERGE et al., <i>Science</i> , 290:1771-1775 (2000)   |                |
|                     | 6                     | BHATTACHARYYA et al., <i>J. Clin. Invest.</i> , 53:1033-1043 (1974)   |                |
|                     | 7                     | BINGHAM et al., <i>Cell</i> , 25:693-704 (1981)   |                |
|                     | 8                     | EWART et al., <i>J. Biol. Chem.</i> , 269:10370-7 (1994)  |                |
|                     | 9                     | GOULD et al., <i>Metabolism</i> , 18(8):652-662 (1969)  |                |
|                     | 10                    | GREGG et al., <i>J. Clin. Invest.</i> , 77:1864-1872 (1986)   |                |
|                     | 11                    | HIGGINS, <i>Annu. Rev. Cell Biol.</i> , 8:67-113 (1992)   |                |
|                     | 12                    | HOBBS et al., <i>Hum. Mutat.</i> , 1:445-466 (1992)   |                |
|                     | 13                    | IKEDA et al., <i>Biochem. Biophys. Res. Commun.</i> , 273:1063-1068 (2000)  |                |
|                     | 14                    | JANOWSKI et al., <i>Nature</i> , 383:728-731 (1996)   |                |
|                     | 15                    | JANOWSKI et al., <i>Proc. Natl. Acad. Sci. USA</i> , 96:266-271 (1999)  |                |
|                     | 16                    | JONES et al., <i>Biochem.</i> , 33:3038-3049 (1994)   |                |
|                     | 17                    | KLUCKEN et al., <i>Proc. Natl. Acad. Sci. USA</i> , 97(2):817-822 (2000)  |                |

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Sheet

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| Examiner Name        | Christopher J. Nichols |

Attorney Docket Number 18781-007320

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|---------------------|-----------------------|---|----------------|
|                     | 18                    | KWITEROVICH, JR., et al., <i>Lancet</i> , 1:468-469 (1981)  |                |
|                     | 19                    | LAWN et al., <i>J. Clin. Invest.</i> , 104(8):25-31 (1999)  |                |
|                     | 20                    | LE SAUX et al., <i>Nat. Genet.</i> , 25:223-227 (2000)  |                |
|                     | 21                    | LU et al., <i>Am. J. Hum. Genet.</i> , 69:278-290 (2001)  |                |
|                     | 22                    | MIETTINEN, <i>Eur. J. Clin. Invest.</i> , 10:27-35 (1980)   |                |
|                     | 23                    | MORGANROTH et al., <i>J. Pediatr.</i> , 85(5):639-643 (1974)  |                |
|                     | 24                    | NYE et al., <i>N.Z. Med. J.</i> , 101:418-419 (1988)  |                |
|                     | 25                    | ORITA et al., <i>Genomics</i> , 5:874-879 (1989)  |                |
|                     | 26                    | PATEL et al., <i>J. Clin. Invest.</i> , 102(5):1041-1044 (1998)   |                |
|                     | 27                    | POLLNER et al., <i>FEBS Lett.</i> , 405:31-36 (1997)  |                |
|                     | 28                    | REPA et al., <i>Science</i> , 289:1524-1529 (2000)  |                |
|                     | 29                    | RUSSELL et al., <i>Biochem.</i> , 31(20):4737-4749 (1992)   |                |
|                     | 30                    | SALEN et al., <i>J. Clin. Invest.</i> , 49:952-967 (1970)   |                |
|                     | 31                    | SALEN et al., <i>J. Lipid Res.</i> , 26:1126-1133 (1985)  |                |

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| <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> |  |      |                                     | Application Number   | 09/989,981              |
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|  |  |      |                                     | Art Unit             | 1647                    |
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| Sheet 4  |  | of 4 | Attorney Docket Number 18781-007320 |                      |                         |

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|  | 32                    | SALEN <i>et al.</i> , <i>J. Lipid Res.</i> , 26:203-209 (1985)  |  |                |
|  | 33                    | SALEN <i>et al.</i> , <i>J. Lipid Res.</i> , 33:945-955 (1992)  |  |                |
|  | 34                    | STELL <i>et al.</i> , <i>Top. Clin. Nutr.</i> , 5(2):63-66 (1990)   |  |                |
|  | 35                    | SULLIVAN <i>et al.</i> , <i>J. Exp. Zool.</i> , 188:225-234 (1974)  |  |                |
|  | 36                    | VENKATESWARAN <i>et al.</i> , <i>J. Biol. Chem.</i> , 275(19):14700-14707 (2000)  |  |                |
|  | 37                    | WALKER <i>et al.</i> <i>Embo. J.</i> , 1(8):945-951 (1982)  |  |                |

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